Author Index of Volume 170

Abba-Touré, A., 199
Abbattista, F., 83
Ahlzén, P.-J., 263
Alapini, F., 373
Andersson, Y., 263
Annapoorni, S., 75

Bakker, K., 109
Bickel, M., 161
Bourne, D. R., 191
Burany, X. M., 27
Buschow, K. H. J., 109

Chamberland, B. L., 93
Chang, Y. C., 55
Chilouet, A., 373
Cordier, G., 333

de Boer, F. R., 109
de Mooij, D. B., 109
Dumke, V. R., 231

Eholié, R., 199
Ellner, M., 171

Fujinaga, Y., 277

Ge, S.-L., 37
Graf, T., 359
Grieb, B., 293
Grupe, M., 271
Guittard, M., 373

Henig, E.-Th., 293
Hou, Y.-T., 37
Huang, S., 37

Iwai, T., 101
Iwasaki, H., 277

Jacobs, H., 145, 185
Jacobs, T. H., 109
Junod, A., 359

Kaczorowski, D., 255
Kamoun, F., 1
Kanellakopulos, B., 161
Kempe, G., 1
Kikegawa, T., 277
Kim, Y.-H., 15
Knothe, M., 287
Kolatschek, K., 171
Kong, L.-S., 37
Kra, G., 199
Kulkarni, S. G., 301
Kusaba, K., 277

Liping, Z., 223
Liu, J. P., 109
Loireau-Lozac'h, A.-M., 373
Lorenz, M., 1

Malik, A. U., 243
Martinot, L., 121
Mazza, D., 83
McColm, I. J., 191
Meyer, G., 327
Missell, F. P., 293
Mobin, M., 243
Möhr, S., 127
Möller, A., 327
Moon, I.-H., 15
Mosley, W. C., 63
Muller, J., 359
Müller-Buschbaum, Hk., 127, 309, 315, 321

Nagabhooshanam, M., 231
Neiva, A. C., 293
Nobile, Jr., A., 63
Noël, H., 255
Northwood, D. O., 27

Ogawa, T., 101

Palewski, T., 7
Pan, Q., 37
Peger, F., 1
Petzow, G., 293
Powietzka, B., 161
Predel, B., 171

Quigley, T. A., 191

Rama Rao, K. V. S., 75
Ramesh, R., 75
Rivet, J., 373
Röhr, C., 333
Rundqvist, S., 263

Seifert, H. J., 135
Siegrist, T., 93
Soll, M., 321
Sood, D. D., 301
Subbanna, C. S., 301
Suk, M.-J., 15
Sun, X. K., 55
Syono, Y., 277

Teichert, A., 315
Tellgren, R., 263
Tenten, A., 145
Tokumitsu, K., 45
Triscone, G., 359
Troć, R., 255

Urland, W., 271

Vallino, M., 83
Venugopal, V., 301
Vogt, R., 309

Walters, R. T., 63
Wei, L., 55

Yang, L., 37
Yang, Y.-C., 37
Yinghong, Z., 223
Yuan, Y., 135

Zachwieja, U., 185
Zhang, X.-D., 37
Zhang, X.-D., 55
Zhong, Z. C., 55

Subject Index of Volume 170

Alkali metals
  thermochemical studies on the systems ABr–$LaBr_3$ ($A \equiv$ Na, K, Rb, Cs), 135
Aluminides
  characterization of the ternary aluminides $Ba_5Cu_{1.9}Al_{3.1}$, $BaAg_{2.4}Al_{2.6}$, $Ba_{16}Ag_7Al_{27}$ and $Ba_3Ag_{14.6}Al_{6.4}$, 333
Aluminium
  on the partial atomic volume and the partial molar enthalpy of aluminium in some phases with Cu and Cu_3Au structures, 171
  $Pb_3MnAl_{10}O_{20}$, a new compound having the $Pb_3GeAl_{10}O_{20}$ structure, 315
Amides
  isolated $Ni_6(NH_2)_{12}$ units in nickel(II) amide, 145
Ammonium chlorides
  thermolysis of ternary ammonium chlorides of rhenium and the noble metals, 327
Amorphous alloys
  crystallization process and Mössbauer study of the melt-quenched amorphous Fe–Gd alloys, 45
Arsenides
  crystal structure, magnetic and electrical properties of a new ternary arsenide $U_2Cu_4As_5$, 255

Barium
  characterization of the ternary aluminides $Ba_5Cu_{1.9}Al_{3.1}$, $BaAg_{2.4}Al_{2.6}$, $Ba_{16}Ag_7Al_{27}$ and $Ba_3Ag_{14.6}Al_{6.4}$, 333
  microstructure and phase relations at high oxygen pressure (90 bar) in the system Y_2O_3–BaO_2–CuO, 359
  on characterization of $BaZnTbO_5$ and $BaZnLa_2O_5$, 127
  the crystal structure of $BaIrO_3$, 93
Bromides
  thermochemical studies on the systems ABr–$LaBr_3$ ($A \equiv$ Na, K, Rb, Cs), 135

Characterization
  on characterization of $BaZnTbO_5$ and $BaZnLa_2O_5$, 127
Chlorides
  an electrochemical method for the preparation of high-purity metallic neptunium from molten chlorides at 450 °C, 121
Chromium
  polytypic structures in close-packed $Zr(FeCr)_2$ Laves phases, 27
Cobalt
  solubility of hydrogen in $Zr_{1-x}Ho_xCo_2$ ($0 \leqslant x \leqslant 1$) alloys, 75
Coordination
  magnesium in an unusual tetragonal-pyramidal coordination: characterization of $Cu_{2-x}Mg_xV_2O_7$ ($x = 1/2$ and 2/3), 309
Copper
  characterization of the ternary aluminides $Ba_5Cu_{1.9}Al_{3.1}$, $BaAg_{2.4}Al_{2.6}$, $Ba_{16}Ag_7Al_{27}$ and $Ba_3Ag_{14.6}Al_{6.4}$, 333
  copper palladium nitrides, $CuPd_xN$ where $x = 0.020$ and 0.989, perovskites having a "bonding $3d^{10}$–$4d^{10}$ exchange effect", 185
  magnesium in an unusual tetragonal-pyramidal coordination: characterization of $Cu_{2-x}Mg_xV_2O_7$ ($x = 1/2$ and 2/3), 309
  microstructure and phase relations at high oxygen pressure (90 bar) in the system Y_2O_3–BaO_2–CuO, 359
  on the partial atomic volume and the partial molar enthalpy of aluminium in some phases with Cu and Cu_3Au structures, 171
  the isothermal section (500 °C) of the phase diagram of the Cu–Ho–Ni ternary system, 223
Crystal structure
  the crystal structure of $BaIrO_3$, 93
Crystallization
  crystallization process and Mössbauer study of the melt-quenched amorphous Fe–Gd alloys, 45

Damage
  resistivity and subsurface damage of linear scratches in p-ZnTe, 231

Deuterium
neutron diffraction studies of the Zr_3P–D system, 263
Dicarbides
hydrolysis of lanthanide dicarbides: rates of reactions with water, 191

Electrical properties
crystal structure, magnetic and electrical properties of a new ternary arsenide $U_2Cu_4As_5$, 255
Electrochemistry
an electrochemical method for the preparation of high-purity metallic neptunium from molten chlorides at 450 °C, 121
Electronic properties
the structural and electronic properties of Na_4UO_5 and Na_4NpO_5, 161
Eutectics
formation of an intermediate phase in eutectic Au–Ge and Ag–Ge systems under high pressure, 277
Exchange
copper palladium nitrides, $CuPd_xN$ where $x = 0.020$ and 0.989, perovskites having a "bonding $3d^{10}$–$4d^{10}$ exchange effect", 185
Explosive reactions
explosive reactions of platinum hydroxylamine compounds, 287

Gadolinium
crystallization process and Mössbauer study of the melt-quenched amorphous Fe–Gd alloys, 45
Gallium
description of the ternary system $Ag–Ga–Te_3$, 373
hydrolytic precipitation of solid solutions of iron(III) and gallium(III) with admixture of fluoride ions, 1
Germanium
description of the ternary system Ge–Tl–Te, 199
formation of an intermediate phase in eutectic Au–Ge and Ag–Ge systems under high pressure, 277
Gold
formation of an intermediate phase in eutectic Au–Ge and Ag–Ge systems under high pressure, 277
on the partial atomic volume and the partial molar enthalpy of aluminium in some phases with Cu and Cu_3Au structures, 171

Helium
helium dynamics in metal tritides
II. The significance of microstructure in the observed helium behavior for La–Ni–Al tritides, 63
Holmium
solubility of hydrogen in $Zr_{1-x}Ho_xCo_2$ $(0 \leqslant x \leqslant 1)$ alloys, 75
the first lanthanide oxomercurate: Ho_2HgO_4, 321
the isothermal section (500 °C) of the phase diagram of the Cu–Ho–Ni ternary system, 223
Hydrogen
solubility of hydrogen in $Zr_{1-x}Ho_xCo_2$ $(0 \leqslant x \leqslant 1)$ alloys, 75
Hydrolysis
hydrolysis of lanthanide dicarbides: rates of reactions with water, 191
Hydrolytic precipitation
hydrolytic precipitation of solid solutions of iron(III) and gallium(III) with admixture of fluoride ions, 1
Hydroxylamines
explosive reactions of platinum hydroxylamine compounds, 287

Interaction
high-temperature interactions of transition-metal carbides with Na_2SO_4, 243
Intermediate phases
formation of an intermediate phase in eutectic Au–Ge and Ag–Ge systems under high pressure, 277
Iridium
the crystal structure of $BaIrO_3$, 93
Iron
crystallization process and Mössbauer study of the melt-quenched amorphous Fe–Gd alloys, 45
hydrolytic precipitation of solid solutions of iron(III) and gallium(III) with admixture of fluoride ions, 1
magnetic properties of $R_2Fe_{17}N_{2.7}$ compounds, 109
phase equilibria around $SmFe_{11}Ti$ at 1000 °C, 293
polytypic structures in close-packed $Zr(FeCr)_2$ Laves phases, 27
structural and magnetic properties of $Nd_{17}Fe_{76}(B_{1-x}C_x)_7$ alloys, 55

Knudsen effusion
Knudsen effusion cell mass spectrometric measurements on the vaporisation of

Rh(s) in the temperature range 1655 to 2217 K, 301

Lanthanides
hydrolysis of lanthanide dicarbides: rates of reactions with water, 191
Lanthanum
characterization and crystal structure of $LaSe_{1.9}$, 271
on characterization of $BaZnTbO_5$ and $BaZnLa_2O_5$, 127
thermochemical studies on the systems ABr–$LaBr_3$ (A≡Na, K, Rb, Cs), 135
Laves phases
polytypic structures in close-packed $Zr(FeCr)_2$ Laves phases, 27
Lead
$Pb_3MnAl_{10}O_{20}$, a new compound having the $Pb_3GeAl_{10}O_{20}$ structure, 315

Magnesium
magnesium in an unusual tetragonal-pyramidal coordination: characterization of $Cu_{2-x}Mg_xV_2O_7$ ($x = 1/2$ and 2/3), 309
Magnetic properties
crystal structure, magnetic and electrical properties of a new ternary arsenide $U_2Cu_4As_5$, 255
magnetic properties of $R_2Fe_{17}N_{2.7}$ compounds, 109
structural and magnetic properties of nitride compounds of the type $R_2Fe_{17}N_x$, $R_2Fe_{14}BN_x$ and $RTiFe_{11}N_x$, 37
structural and magnetic properties of $Nd_{17}Fe_{76}(B_{1-x}C_x)_7$ alloys, 55
Manganese
$Pb_3MnAl_{10}O_{20}$, a new compound having the $Pb_3GeAl_{10}O_{20}$ structure, 315
Mercury
the first lanthanide oxomercurate: Ho_2HgO_4, 321
Metamagnetic transitions
metamagnetic transitions in $(UAs)_x(ThSe)_{1-x}$ solid solutions, 7
Microstructure
helium dynamics in metal tritides II. The significance of microstructure in the observed helium behavior for La–Ni–Al tritides, 63
microstructure and phase relations at high oxygen pressure (90 bar) in the system Y_2O_3–BaO_2–CuO, 359

Neodymium
structural and magnetic properties of $Nd_{17}Fe_{76}(B_{1-x}C_x)_7$ alloys, 55
Neptunium
an electrochemical method for the preparation of high-purity metallic neptunium from molten chlorides at 450 °C, 121
the structural and electronic properties of Na_4UO_5 and Na_4NpO_5, 161
Neutron diffraction
neutron diffraction studies of the Zr_3P–D system, 263
Nickel
isolated $Ni_6(NH_2)_{12}$ units in nickel(II) amide, 145
the isothermal section (500 °C) of the phase diagram of the Cu–Ho–Ni ternary system, 223
Nickel activator
the removal of an Ni-activator from the Ni-activated sintered W-compact by high vacuum treatment, 15
Nitride compounds
structural and magnetic properties of nitride compounds of the type $R_2Fe_{17}N_x$, $R_2Fe_{14}BN_x$ and $RTiFe_{11}N_x$, 37
Nitrides
copper palladium nitrides, $CuPd_xN$ where $x = 0.020$ and 0.989, perovskites having a "bonding $3d^{10}$–$4d^{10}$ exchange effect", 185
magnetic properties of $R_2Fe_{17}N_{2.7}$ compounds, 109
Noble metals
thermolysis of ternary ammonium chlorides of rhenium and the noble metals, 327

Oximercurates
the first lanthanide oxomercurate: Ho_2HgO_4, 321

Palladium
copper palladium nitrides, $CuPd_xN$ where $x = 0.020$ and 0.989, perovskites having a "bonding $3d^{10}$–$4d^{10}$ exchange effect", 185
Partial atomic volume
on the partial atomic volume and the partial molar enthalpy of aluminium in some phases with Cu and Cu_3Au structures, 171
Partial molar enthalpy
on the partial atomic volume and the partial molar enthalpy of aluminium in some phases with Cu and Cu_3Au structures, 171

Perovskites
copper palladium nitrides, $CuPd_xN$ where $x = 0.020$ and 0.989, perovskites having a "bonding $3d^{10}$–$4d^{10}$ exchange effect", 185
influence of the size of RE^{3+} ions on the stability of new perovskite-like phases in the most basic region of the systems Ba–RE–Cu–O (RE ≡ Ln, Y), 83
Phase diagrams
the isothermal section (500 °C) of the phase diagram of the Cu–Ho–Ni ternary system, 223
Phase equilibria
phase equilibria around $SmFe_{11}Ti$ at 1000 °C, 293
Phase relations
microstructure and phase relations at high oxygen pressure (90 bar) in the system Y_2O_3–BaO_2–CuO, 359
Phosphorus
neutron diffraction studies of the Zr_3P–D system, 263
Platinum
explosive reactions of platinum hydroxylamine compounds, 287
Polytypic structures
polytypic structures in close-packed $Zr(FeCr)_2$ Laves phases, 27

Rare-earth ions
influence of the size of RE^{3+} ions on the stability of new perovskite-like phases in the most basic region of the systems Ba–RE–Cu–O (RE ≡ Ln, Y), 83
Rates of reaction
hydrolysis of lanthanide dicarbides: rates of reactions with water, 191
Resistivity
resistivity and subsurface damage of linear scratches in p-ZnTe, 231
Rhenium
thermolysis of ternary ammonium chlorides of rhenium and the noble metals, 327
Rhodium
Knudsen effusion cell mass spectrometric measurements on the vaporisation of Rh(s) in the temperature range 1655 to 2217 K, 301

Samarium
phase equilibria around $SmFe_{11}Ti$ at 1000 °C, 293
Scratches
resistivity and subsurface damage of linear scratches in p-ZnTe, 231
Selenium
characterization and crystal structure of $LaSe_{1.9}$, 271
Silver
characterization of the ternary aluminides $Ba_5Cu_{1.9}Al_{3.1}$, $BaAg_{2.4}Al_{2.6}$, $Ba_{16}Ag_7Al_{27}$ and $Ba_3Ag_{14.6}Al_{6.4}$, 333
description of the ternary system $Ag–Ga–Te_3$, 373
formation of an intermediate phase in eutectic Au–Ge and Ag–Ge systems under high pressure, 277
Size
influence of the size of RE^{3+} ions on the stability of new perovskite-like phases in the most basic region of the systems Ba–RE–Cu–O (RE ≡ Ln, Y), 83
Sodium
the structural and electronic properties of Na_4UO_5 and Na_4NpO_5, 161
Sodium sulphate
high-temperature interactions of transition-metal carbides with Na_2SO_4, 243
Solid solutions
hydrolytic precipitation of solid solutions of iron(III) and gallium(III) with admixture of fluoride ions, 1
metamagnetic transitions in $(UAs)_x(ThSe)_{1-x}$ solid solutions, 7
Solubility
solubility of hydrogen in $Zr_{1-x}Ho_xCo_2$ $(0 \leqslant x \leqslant 1)$ alloys, 75
Stability
influence of the size of RE^{3+} ions on the stability of new perovskite-like phases in the most basic region of the systems Ba–RE–Cu–O (RE ≡ Ln, Y), 83
Structure
characterization and crystal structure of $LaSe_{1.9}$, 271
crystal structure, magnetic and electrical properties of a new ternary arsenide $U_2Cu_4As_5$, 255
structural and magnetic properties of nitride compounds of the type $R_2Fe_{17}N_x$, $R_2Fe_{14}BN_x$ and $RTiFe_{11}N_x$, 37
structural and magnetic properties of $Nd_{17}Fe_{76}(B_{1-x}C_x)_7$ alloys, 55
the structural and electronic properties of Na_4UO_5 and Na_4NpO_5, 161

Tellurium
description of the ternary system Ge–Tl–Te, 199

description of the ternary system Ag–Ga–Te_3, 373
Terbium
on characterization of $BaZnTbO_5$ and $BaZnLa_2O_5$, 127
Thallium
description of the ternary system Ge–Tl–Te, 199
Thermochemical modelling
thermochemical modelling of U–Zr alloys, 101
Thermochemical studies
thermochemical studies on the systems ABr–$LaBr_3$ (A≡Na, K, Rb, Cs), 135
Thermolysis
thermolysis of ternary ammonium chlorides of rhenium and the noble metals, 327
Titanium
phase equilibria around $SmFe_{11}Ti$ at 1000 °C, 293
Transition-metal carbides
high-temperature interactions of transition-metal carbides with Na_2SO_4, 243
Tritides
helium dynamics in metal tritides II. The significance of microstructure in the observed helium behavior for La–Ni–Al tritides, 63
Tungsten
the removal of an Ni-activator from the Ni-activated sintered W-compact by high vacuum treatment, 15

Uranium
the structural and electronic properties of Na_4UO_5 and Na_4NpO_5, 161
thermochemical modelling of U–Zr alloys, 101

Vanadium
magnesium in an unusual tetragonal-pyramidal coordination: characterization of $Cu_{2-x}Mg_xV_2O_7$ ($x = 1/2$ and $2/3$), 309
Vaporisation
Knudsen effusion cell mass spectrometric measurements on the vaporisation of Rh(s) in the temperature range 1655 to 2217 K, 301

Yttrium
microstructure and phase relations at high oxygen pressure (90 bar) in the system Y_2O_3–BaO_2–CuO, 359

Zinc
on characterization of $BaZnTbO_5$ and $BaZnLa_2O_5$, 127
Zirconium
neutron diffraction studies of the Zr_3P–D system, 263
polytypic structures in close-packed $Zr(FeCr)_2$ Laves phases, 27
solubility of hydrogen in $Zr_{1-x}Ho_xCo_2$ ($0 \leqslant x \leqslant 1$) alloys, 75
thermochemical modelling of U–Zr alloys, 101